In the Claims

Please replace all prior versions, and listings, of claims in the application with the following list of claims:

1- 108. (Cancelled)

109. (Currently amended) A device for adhering at least one ~~biological species~~ cell in a specific and predetermined pattern comprising:

a surface; and

a plurality of immobilization islands in a specific and predetermined pattern over the surface that adhere ~~biological species~~ cells to the islands, the islands isolated from each other by a background region contiguous with the islands and to which the ~~biological species~~ cells do not adhere, and wherein the islands or the background region or both comprise a self-assembled monolayer.

110. (Cancelled).

111. (Previously presented) The device of claim 109 wherein the background region or the immobilization islands comprise more than one self-assembled monolayer.

112 – 128. (Cancelled)

129. (New) The device of claim 109, wherein the surface is defined by a plate.

130. (New) The device of claim 129, wherein the plate is transparent to electromagnetic radiation.

131. (New) The device of claim 109, wherein at least one of the immobilization islands comprises a self-assembled monolayer.

132. (New) The device of claim 109, wherein the background region comprises a self-assembled monolayer.

133. (New) The device of claim 109, wherein the immobilization islands are located in a plurality of predetermined positions on the surface.

134. (New) The device of claim 109, wherein at least one of the immobilization islands binds only a selected cell type.

135. (New) The device of claim 109, wherein the immobilization islands are able to adhere one cell type but are not able to substantially adhere a second cell type different from the first cell type.

136. (New) The device of claim 109, wherein the plurality of immobilization islands includes a first island able to adhere a first population of cells and a second island able to adhere of a second population of cells different from the first population of cells.

137. (New) The device of claim 109, wherein at least one of the plurality of immobilization islands has a predetermined shape that is able to influence the shape of a cell adhered thereto.

138. (New) The device of claim 109, wherein the immobilization islands are sufficiently isolated to prevent cells adhered to the immobilization islands from contacting each other except via formation of cellular bridges above and free of adhesive contact with the background region.

139. (New) The method of claim 109, wherein at least one of the plurality of immobilization islands has a size chosen such that only an individual cell is able to adhere thereto.

140. (New) The method of claim 109, wherein at least one of the plurality of immobilization islands has a size sufficient to allow a plurality of cells to adhere thereto.

141. (New) The device of claim 109, wherein at least one of the immobilization islands is between 1 and 2,500 square microns.

142. (New) The device of claim 109, wherein at least one of the immobilization islands is between 1 and 500 square microns.

143. (New) The device of claim 109, wherein at least one of the immobilization islands is between 1 and 100 square microns.

144. (New) The device of claim 109, wherein at least one of the immobilization islands has a lateral dimension of between 0.2 and 10 microns.

145. (New) The device of claim 109, wherein at least one of the immobilization islands is elongated.